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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,051	11/18/2003	Thomas Arnold Anschutz	9400-47 (030312)	4265
36072 7590 05/27/2008 MYERS BIGEL SIBLEY & SAJOVEC, P.A. P.O. BOX 37428 RALEIGH, NC 27627				
EXAMINER				
DAFTUAR, SAKET K				
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2151				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/716,051

**Applicant(s)**

ANSCHUTZ ET AL.

**Examiner**

SAKET K. DAFTUAR

**Art Unit**

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Response to Amendment***

1. This office action is responsive to the amendment filed on March 25<sup>th</sup>, 2008.

Claims 1-44 are presented for the further examination.

***Response to Arguments***

2. Applicant's arguments filed March 25<sup>th</sup>, 2008 have been fully considered but they are not persuasive. As per arguments filed, applicant continues to argue in substance that:

- a. Freed failed to disclose a system that is configured to manage QoS session authentication and/or bandwidth allocation for an access session from the CPN and a first subsystem and a second subsystem that is configured to manage QoS, session authentication and/or bandwidth allocation for an access session from the CPN; wherein the access session comprises a connection between the NSP and/or ASP and the CPN; and wherein the application flow comprises a set of data packets associated with one of a plurality of application provided via the access session between the NSP and/or ASP and the CPN.

In response to applicant argument a), Freed discloses a system and method for providing distributed and dynamic network services for remote access server users and discloses a system that is configured to manage QoS (see column 3, lines 3-46), session authentication (see column 3, lines 3-46; see column 13, line 18 – column 14, line 30 and see figures 5-8 ) and/or bandwidth allocation (column 7, lines 53-57, column 13, line 18 – column 14, line 30 and

Figures 5-6, step 166 and column 18, line 43 – column 19, line 12) for an access session from the CPN (see figure 1, CPE 18).

However, Freed is silent about the system having a plurality of subsystem.

DSL Evolution teaches a first subsystem (User1, Figure 2) and a second subsystem (User 2, Figure 2) that is configured to manage QoS, session authentication and/or bandwidth allocation for an access session from the CPN, wherein the access session comprises a connection between the NSP and/or ASP and the CPN (see pages 6-8, section 3.2 and Figure 2 and page 15, section 4.2.4.3 communication protocols: IP Routed Connection); and wherein the application flow comprises a set of data packets associated with one of a plurality of application provided via the access session between the NSP and/or ASP and the CPN (see pages 6-8, section 3.2-3.3.4; see pages 28-34; section 5.3 – 5.3.2.3 and Figure 2).

Therefore, it would have been obvious at the time the invention was made to combine the teachings of Freed and DSL Evolution to obtain a predictable result to provide an advanced DSL architecture that provides a dynamic network services for users in a distributed system and for remote user for accessing services remotely with enhanced bandwidth and quality.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over DSL Evolution-Architecture Requirements for the Support of Qos Enabled IP Services, Revision 8 (hereinafter DSL Evolution) and Freed et al. US Patent Number 7,073,055 B1 (hereinafter Freed).

As per claim 1, Freed discloses a system and method for providing distributed and dynamic network services for remote access server users and discloses a system that is configured to manage QoS (see column 3, lines 3-46), session authentication (see column 3, lines 3-46; see column 13, line 18 – column 14, line 30 and see figures 5-8 ) and/or bandwidth allocation (column 7, lines 53-57, column 13, line 18 – column 14, line 30 and Figures 5-6, step 166 and column 18, line 43 – column 19, line 12) for an access session from the CPN (see figure 1, CPE 18).

However, Freed is silent about the system having a plurality of subsystem.

DSL Evolution teaches a first subsystem (User1, Figure 2) and a second subsystem (User 2, Figure 2) that is configured to manage QoS, session authentication and/or bandwidth allocation for an access session from the CPN, wherein the access session comprises a connection between the NSP and/or ASP and the CPN (see pages 6-8, section 3.2 and Figure 2 and page 15, section 4.2.4.3 communication protocols: IP Routed Connection); and wherein the application flow comprises a set of data packets associated with one of a plurality

of application provided via the access session between the NSP and/or ASP and the CPN (see pages 6-8, section 3.2-3.3.4; see pages 28-34; section 5.3 – 5.3.2.3 and Figure 2).

Therefore, it would have been obvious at the time the invention was made to combine the teachings of Freed and DSL Evolution to obtain a predictable result to provide an advanced DSL architecture that provides a dynamic network services for users in a distributed system and for remote user for accessing services remotely with enhanced bandwidth and quality.

As per claim 2, DSL Evolution teaches the first subsystem comprises a RAN to RG access session message generator (see page 21, section 4.2.6.2 communication protocols) that is configured to send an Update Session Bandwidth Info message from the RAN to the RG (see Figure 14, section 4.2.6.2; 4.2.7.2 Routing Gateway) to notify the RG when new bandwidth and/or new QoS information is available for a session (see Figure 14, section 4.2.6.2; 4.2.7.2 Routing Gateway; and Figure 16).

As per claim 3, DSL Evolution teaches the second subsystem comprises a RAN to RG application flow message generator (see page 21, section 4.2.6.2 communication protocols) that is configured to send an Update Application Flow Control Info message from the RAN to the RG to notify the RG when new bandwidth and/or new QoS information is available for an application flow (see Figure 14, section 4.2.6.2; 4.2.7.2 Routing Gateway; and Figure 16).

As per claim 4, DSL Evolution teaches the RAN to RG access session message generator (see page 21, section 4.2.6.2 communication protocols) is further configured to send an Update Session Bandwidth Response message from the RAN to the RG to notify the RG of access session bandwidth and/or QoS settings that are stored in the RAN for the CPN (see Figure 14, section 4.2.6.2; 4.2.7 and 4.2.7..2 Routing Gateway; and Figures 16 and 21).

As per claim 5, DSL Evolution teaches the RAN to RG application flow message generator (see page 21, section 4.2.6.2 communication protocols) is further configured to send an Update Flow Control Response message from the RAN to the RG to notify the RG of application flow bandwidth and/or QoS settings that are stored in the RAN for the CPN (see Figure 14, section 4.2.6.2; 4.2.7 and 4.2.7..2 Routing Gateway; and Figures 16 and 21).

As per claim 6, DSL Evolution teaches the first subsystem further comprises a RG to RAN access session message generator (see page 21, section 4.2.6.2 communication protocols) that is configured to send an Update Session Bandwidth Request message from the RG to the RAN to obtain from the RG access session bandwidth and/or QoS settings that are stored in the RAN for the CPN (see Figure 14, section 4.2.6.2; 4.2.7 and 4.2.7..2 Routing Gateway; and Figures 16 and 21).

As per claim 7, DSL Evolution teaches the second subsystem further comprises a RG to RAN application flow message generator that is configured to send an Update Application Flow Control Request message from the RG to the

RAN to obtain from the RG application flow bandwidth and/or QoS settings that are stored in the RAN for the CPN (see Figure 14, section 4.2.6.2; 4.2.7 and 4.2.7..2 Routing Gateway; and Figures 16 and 21).

As per claim 8, DSL Evolution teaches a RAN to ASP service session message generator that is configured to send an Establish Service Session Response message from the RAN to the ASP to indicate to the ASP what RAN resources are authorized for an access session (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 9, DSL Evolution teaches the second subsystem further comprises a RAN to ASP application flow message generator that is configured to send a Create Application Flow Control Response message from the RAN to the ASP to indicate to the ASP that an application flow control request from the ASP to the RAN has been accomplished successfully ((see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 10, DSL Evolution teaches the RAN to ASP application flow message generator is further configured to send a Delete Application Flow Control Response message from the RAN to the ASP to indicate to the ASP that an application flow has been deleted successfully (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 11, DSL Evolution teaches an ASP to RAN service session message generator that is configured to send an Establish Service Session Request message from the ASP to the RAN to request establishing an access



session and to indicate to the RAN a life span of the requested access session (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 12, DSL Evolution teaches the second subsystem further comprises an ASP to RAN application flow message generator that is configured to send a Create Application Flow Control Request message from the ASP to the RAN to request establishing an application flow and to indicate to the RAN a type of application flow, a priority of the application flow and a bandwidth of the application flow (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 13, DSL Evolution teaches the ASP to RAN application flow message generator is further configured to send a Delete Application Flow Control Request message from the ASP to the RAN to request deleting an application flow (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 14, DSL Evolution teaches the ASP to RAN application flow message generator is further configured to send a Change Application Flow Control Request message from the ASP to the RAN to request changing an application flow (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 15, DSL Evolution teaches the ASP to RAN application flow message generator is further configured to send a Query Application Flow Control Request message from the ASP to the RAN to query the RAN as to what resources are assigned to an application flow (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 16, DSL Evolution teaches the RAN to ASP application flow message generator is further configured to send a Query Application Flow Control Response message from the RAN to the ASP to indicate to the ASP what resources are assigned to an application flow (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 17, DSL Evolution teaches the ASP to RAN access session message generator is further configured to send a Query Session Bandwidth Request message from the ASP to the RAN to query the RAN as to what resources are assigned to an access session (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 18, DSL Evolution teaches the RAN to ASP access session message generator is further configured to send a Query Session Bandwidth Response message from the RAN to the ASP to indicate to the ASP what resources are assigned to an access session (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 19, DSL Evolution teaches the RAN to ASP service session message generator is further configured to send a Terminate Service Session Response message from the RAN to the ASP to indicate to the ASP whether a session has been terminated successfully (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 20, DSL Evolution teaches the ASP to RAN service session message generator is further configured to send a Terminate Service Session

Request message from the ASP to the RAN to request terminating a session (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 21, DSL Evolution teaches a RAN to NSP service session message generator that is configured to send an Establish Service Session Response message from the RAN to the NSP to indicate to the NSP what RAN resources are authorized for a service session (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 22, DSL Evolution teaches an NSP to RAN service session message generator that is configured to send an Establish Service Session Request message from the NSP to the RAN to request establishing a service session and to indicate to the RAN a life span of the requested service session (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 23, DSL Evolution teaches the NSP to RAN access session message generator is further configured to send a Change Session Bandwidth Request message from the NSP to the RAN to change the QoS and/or bandwidth provided by the RAN for an access session (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 24, DSL Evolution teaches the NSP to RAN access session message generator is further configured to send a Query Session Bandwidth Request message from the ASP to the RAN to query the RAN as to what resources are assigned to an access session (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 25, DSL Evolution teaches the RAN to NSP service session message generator is further configured to send a Terminate Service Session Response message from the RAN to the NSP to indicate whether a session has been terminated successfully (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claim 26, DSL Evolution teaches the NSP to RAN service session message generator is further configured to send a Terminate Service Session Request message from the NSP to RAN to request terminating a session (see section 5.3, 5.3.1, 5.3.2 and Figure 21).

As per claims 27-31, they do not teach or further define over the limitation as recited in claims 1-26. Therefore, claims 27-31 are rejected under same scope as discussed in claims 1-26, *supra*.

As per claims 32-44, they do not teach or further define over the limitation as recited in claims 1-26. Therefore, claims 32-44 are rejected under same scope as discussed in claims 1-26, *supra*.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Quality Assured Network Service Provision System Compatible with a Multi-Domain Network and Service Provision Method and Service Provision Method and Service Broker Device by Nishi, US Patent Number 7,254,645 B2.

b. Apparatus and Method for Dynamic Bandwidth Allocation by Chawla et al.

US Patent Number 6,876,668 B1.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### **Contact Information**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saket K. Daftuar whose telephone number is 571-272-8363. The examiner can normally be reached on 8:30am-5:00pm M-W.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2100

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. K. D./

Examiner, Art Unit 2151

/John Follansbee/

Supervisory Patent Examiner, Art Unit 2151